

Work Order ID 137952

October 16, 2015 11:21:38 AM

137952

Page 1

Item ID: D350-636-016 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.
 Start Date: 10/16/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 10/30/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: SU Date: 10 01 5 1 0 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start ***NR1***
 Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
D4168-042	B								

100 Document Control 0.00
100 DOCUMENT CONTROL
 DC Memo 0.00
 Doc.Control -USB or Paperwork record fwd angle: 89.5°

Photocopy blue file and type labels per PPP D350-636-016 CHG 005

MLJ 15-11-25
 15-10-20
 1X DAS 28 9-89 NOV 27 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

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Page 2

Item ID: D350-636-016

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N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015 Start Qty: 1.00 ***1***

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Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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110

0.00

110

Skidtubes

0.01

Skidtubes

Memo

1- Pick D2600-3 Bent

2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D4168

3- Drill pilot holes for blade fitting bolt holes using DT8983. Start with 3/16", then open to 0.500" using center drill then ream holes using 0.500" reamer. PIV first side. Repeat process on second side.

ENSURE PROPER POSITIONING FWD BEND MUST BE FACING UP WHEN DRILLING FIRST SIDE

4- Locate DT8329 off of blade fitting bolt holes and drill pilot holes for blade fitting, section R-R and open to 0.500"

6- Drill most FWD wearplate hole using DT9678 locating of 66.54" hole

7- Open up holes of Detail J to 0.297" (total of 2 holes per side) +.201" (total of one hole per side) as per dwg D4168.

8- Weld D2744 Cap as per Dwg D4168 and QSI 004. Fill grooves in bend left from bending as per QSI 004

A/R Aluminum Rod batch: *m132917/m131562*

9- Grind welds flush as per Dwg D4168

*15-10-20**7 BE15-10-21*

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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐					

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Setup Start *NS1*

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Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Stop *NS2*

Start Date: 10/16/2015 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 10/30/2015 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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120	QC10- Inspect visual per QSI004- ground welds	0.00
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120

QC

Quality Control

Memo

0.00

DAS

38

9-89

OCT 22 2015

130	QC5- Inspect part completeness to step on W/O	0.00
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130

QC

Quality Control

Memo

0.00

DA:

38

9-86

OCT 27 9-89 2015

140	Chemical Conversion Coat per QSI005 4.1	0.00
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140

HandFinish

Hand Finishing

Memo

0.00

15-10-22

DCL

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**WORK ORDER NON-CONFORMANCE / UPDATE**

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Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
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			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

October 16, 2015 11:21:38 AM

137952

Page 4

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 10/16/2015 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 10/30/2015 **Req'd Qty:** 1.00 *** 1 ***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/
Work Center ID

Operation Description

Set Up/ Run Hours

Tool ID**Tool #****Plan
Code**

**Accept
Qty**

Reject
QtyReject
Number

**Insp.
Stamp**

150

QC7-Inspect Chemical Conversion Coat

0.00

150

QC

Memo

0.00

Quality Control

15-10-22

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
				OTHER :							

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Page 5

Item ID: D350-636-016

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/30/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

0.00

160

Skidtubes

0.02

Skidtubes

Memo

1-Open up holes using hole saw of Detail L and ground handling to 0.625"
(total of 8 holes per side)
as per dwg D4168.

2-Open up holes using hole saw of Detail K to 0.750" (total of 4 holes per side)
as per dwg D4168.

3- Open float hole to 0.500" using uni-bit (4 per side) and Run on wearplate
holes to .375" 4 per side

4-Chamfer holes of Detail K,L, ground handling and float holes per dwg D4168
(welding instructions on sheet 9)

5-Deburr and blow out all chips from inside of tube

6- Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015, let cure for 12hrs.

A/R Sikaflex-291

batch: 133136exp. date: 16-2-12

ATTN: USE I-BEAM LOCATION AID (BLADE FITTING)

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D4168 & QSI004
(welding instructions on sheet 8)

A/R Aluminum Rod

batch: M132917

9- At section AP-AP drill out x-bolt spacer to 0.404"

70615-11-0315-10-22

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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																								OTHER : _____																																							

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Page 6

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10-Grind welds flush as per Dwg D4168 **15-11-09**

11-Spot face ground handling holes section (total of 4 places per side) as per **15-11-12**
 dwg D4168

12-C'bore section CH-CH. ADJUST TOOLING AS REQUIRED. **15-11-12**
 VERF BY: **DP**

13- Deburr holes, ensure tube is free of all scratches before sending to paint. **15-11-12**

***** FOR DELUXE SKIDTUBE IF APPLICABLE DRILL TOW RING
 HOLE IN TUBE *****
 *****REF TO W/O BATCH: **101A** ***** **15-11-12**

170 QC10- Inspect visual per QSI004- ground welds 0.00

170

QC

Quality Control

Memo 0.00

DAS
38

NOV 12 2015

DQA: _____ Date: _____



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Page 7

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180	QC5- Inspect part completeness to step on W/O	0.00							DAS 38 9-89
180									
QC	Memo	0.00							
Quality Control	***VERIFY C'BOARD IS GOOD***								NOV 12 2015
190	Pressure Wash per QSI005 4.3	0.00							
190									
HandFinish	Memo	0.01							
Hand Finishing	Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.								11/24/15
200		0.00							
200									
SprayPaint	Memo	0.00							DAS 41 9-89
Spray Painting	1- PRIME AS PER DWG AND QSI 005 4.2 PRIMER PRC DESOTO 515X349 BATCH: <u>130992</u>								15-11-13
	2- PAINT WHITE AS PER DWG AND QSI 005 4.2 PAINT BATCH: <u>133325</u>								

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

Work Order ID 137952

October 16, 2015 11:21:38 AM

137952

Page 8

Item ID: D350-636-016 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.
 Start Date: 10/16/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 10/30/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	QC14- Inspect Spray Paint	0.00							
210									
QC	Memo	0.00							
Quality Control	Inspect for foreign object per QSI 024								
230		0.00							
230	HandFinishing								
HandFinish	Memo	0.02							
Hand Finishing	1- Install inserts as per Dwg D4168								
	2-Inspect for Foreign Objects								
	3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D4168								
	SIKA FLEX 241								
	BATCH: 1133427								
	EXP DATE: 1661								
	4-assemble o'ring to plug as per dwg D3492 and apply o'ring lube								
	A/R 55-o'ring lube batch: 1133145								
	5-Coat all exposed fasteners with "LPS Procyon" batch: 1133145								

DAS
15
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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Work Order ID 137952

137952

Page 9

October 16, 2015 11:21:38 AM

Item ID: D350-636-016

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/30/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

240

QC5- Inspect part completeness to step on W/O

0.00

240

QC

Memo

0.00

Quality Control

DAS

38

9-89

NOV 20 2015

250

Pick Kit

0.00

250

Packaging

Memo

0.00

Packaging

If making a D350-636-216
pick kit will only requires:
1 X AN3C37A
1 X AN3C34A
1 X AN3C42A
2 X D3493-1

DAS

26

9-89

NOV 25 2015

260

QC4- 100% Inspect kits for completeness

0.00

260

QC

Memo

0.00

Quality Control

*****ensure antiseize is on AN8C21A bolts*****

DAS

28

9-89

NOV 27 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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Work Order ID 137952

October 16, 2015 11:21:38 AM

137952

Page 10

Item ID: D350-636-016

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 10/30/2015 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270		0.00							
270	Packaging					<u>1X</u>	DAS 28	NOV 30 2015	
Packaging	Memo	0.00					3-89		
Packaging	Identify and pack for shipping as per PPPD350-636-016 Location: FG071						BAS 27 9-89		
280	QC21- Final Inspection - Work Order Release	0.00							
280								NOV 30 2015	
QC	Memo	0.00				<u>ML5</u>			
Quality Control									

ML5 NOV 30 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY																																																											
☐ Environment	☐ Design	☐ Doc/Data	☐ Equip/Tooling	☐ Handling/Pre	☐ Material	☐ Internal Transport	☐ Tribal Knowledge	☐ LOA	☐ Substation	☐ Past Expiry Date	☐ Misidentified	☐ No Re-verification	☐ Operator	☐ Offset/Setup	☐ Supplier	☐ Training	☐ Use for Testing	☐ Poor Information	☐ Rushing	☐ Product Improvement	☐ Process Improvement	☐ Manufacturing Process	☐ Past Due	☐ Pressure/Forced	☐ Bending	☐ Centre Not Concentric	☐ Cracks	☐ Crimp/Kink/Ripple/Wave	☐ Cuffs	☐ Crushing	☐ Heat Treat	☐ Wave/Twist in Tube	☐ Marks/Chatter	☐ Temperature/Cure	☐ Set-up	☐ BOM/Route	☐ Broken/Damage/Defect	☐ Inspection Incomplete/Unqualified	☐ Contamination	☐ Countersink	☐ Cut Too Short	☐ Instructions Incomplete/Unclear	☐ Drill Holes	☐ Power Loss/Surge	☐ Folio/Program	☐ Grain	☐ Weld	☐ Wrong Stock Pulled	☐ Out of Sequence	☐ Off-set	☐ Mislabeled	☐ Fit/Function	☐ Misaligned/off center	☐ Positioned Wrong	☐ Outside Dimensions	☐ Over/Under tolerance	☐ Part Incorrect	☐ Part Lost/Missing	☐ Part Moved	☐ Drawing	☐ Finish	☐ Misread	☐ Turning Sequence
																								OTHER : _____																																							

Picklist Print

October 16, 2015 11:21:43 AM

Page 1

Work Order ID: 137952

137952

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP rev:A 10.09.28 new issue DD verf:EC IPP Rev:B
11.04.14 ecn11-553 DD verf:EC IPP Rev:C 11.10.18 as
per NCR 11-906 DD verf:EC IPP REV:D 13.08.28 PER ECN13-
594 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3490-1		Manufactured	No			160	Each	90.0000	4	4			
---------	--	--------------	----	--	--	-----	------	---------	---	---	--	--	--

D3490-1

Cross Bolt Spacer

**

BE 15-10-29

Location	Loc Qty	Loc Code
----------	---------	----------

LG	23	
----	----	--

133205	23	
--------	----	--

LG001	67	
-------	----	--

434019	67	
--------	----	--

D3490-3		Manufactured	No			160	Each	19.0000	4	4			
---------	--	--------------	----	--	--	-----	------	---------	---	---	--	--	--

D3490-3

Cross Bolt Spacer

**

BE 15-10-29

Location	Loc Qty	Loc Code
----------	---------	----------

LG	19	
----	----	--

130730	19	
--------	----	--

AN3C34A		Purchased	No			230	Each	13.0000	1	1			
---------	--	-----------	----	--	--	-----	------	---------	---	---	--	--	--

AN3C34A

BOLT

**

JP.

Location	Loc Qty	Loc Code
----------	---------	----------

ST348	13	
-------	----	--

m131618	3	
---------	---	--

m133077	10	
---------	----	--

Picklist Print

October 16, 2015 11:21:43 AM

Page 2

Work Order ID: 137952

137952

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

AN3C36A

Purchased

No

230

Each

Start Qty: 1.00
4 4

Required Qty: 1.00

AN3C36A

Bolt

**

all 10/16/15

Location

Loc Qty

Loc Code

FG	47	
101261	4	
122204	2	
m131367	1	
m132169	40	
FP001	27	
m131856	27	<i>x2</i>
ST338a	152	
m132381	80	
m132522	72	
ST347	74	<i>x2</i>
131651	74	

AN3C37A

Purchased

No

230

Each

457.0000 1 1

AN3C37A

BOLT

**

DAS 26 9-89

Location

Loc Qty

Loc Code

ST338a	457	
131651	70	
M128773	1	
M129650	55	
M131367	70	
M131856	70	
M132169	70	
M132381	70	
M132522	51	<i>x</i>

DAS 28 9-89

NOV 25 2015

Picklist Print

October 16, 2015 11:21:43 AM

Page 3

Work Order ID: 137952

137952

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

AN3C42A

Purchased No

230

Each

81.0000

Start Qty: 1.00

Required Qty: 1.00

AN3C42A

Bolt

**

DAS
26
9-89

NOV 25 2015

DAS
28
9-89

Location

Loc Qty

Loc Code

FG	5	
121103	5	
ST338a	61	
m130485	3	
m131856	10	
m132381	8	
m132522	10	
m132674	10	
m133091	10	
m133336	10	
ST346	15	
m131854	5	
m131855	10	

D3488-042

Manufactured No

230

Each

15.0000

1

1

D3488-042

Blade Fitting RH

**

10/11/18

Location

Loc Qty

Loc Code

FP	8	
131621	8	
FP001	7	
129602	7	

D3492-1

Manufactured No

230

Each

19.0000

8

8

D3492-1

Plug

**

10/11/18

Location

Loc Qty

Loc Code

FP001	19	
131952	19	

B 136687

28

October 16, 2015 11:21:43 AM

Shop Packet Print

Page 3

Picklist Print

October 16, 2015 11:21:43 AM

Page 4

Work Order ID: 137952

137952

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

D3492-3

Manufactured No

230

Each

62.0000

Start Qty: 1.00

8

8

Required Qty: 1.00

D3492-3

Plug

Location

Loc Qty

Loc Code

FP001

62

125905

2

131036

1

131899

10

133470

49

B137728

VS

X3

D3873-1

Manufactured No

230

Each

13.0000

7

7

D3873-1

Bushing

Location

Loc Qty

Loc Code

FP001

7

126709

2

129742

5

ST063

6

134885

6

M1137632

X7

D4154-041

Manufactured No

230

Each

0.0000

1

1

D4154-041

Wearplate Assembly

D4170-1

Manufactured No

230

Each

69.0000

4

4

D4170-1

Bushing

Location

Loc Qty

Loc Code

LG001

69

f07896

69

4

Picklist Print

October 16, 2015 11:21:43 AM

Page 5

Work Order ID: 137952

137952

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

D4171-1

Manufactured No

230 Each

Start Qty: 1.00
18.0000 1 1

Required Qty: 1.00

D4171-1

Bushing

**

Sp

Location

Loc Qty

Loc Code

ST088

18

129060

18

MS21043-3

Purchased No

230 Each

690.0000 5 5

**

1X

all 15/11/18

MS21043-3

Nut

Location

Loc Qty

Loc Code

FG

80

103691

80

FP001

11

m130673

11

GA

139

m130673

15

m131677

124

ST304

423

m131340

160

m133031

263

ST308

37

m132551

37

85

Picklist Print

October 16, 2015 11:21:43 AM

Page 6

Work Order ID: 137952

137952

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

NAS1149C0363R

Purchased

No

230

Each

Start Qty: 1.00
1,083.000 9 9

Required Qty: 1.00

NAS1149C0363R

Washer

all 10/16/15

Location

Loc Qty

Loc Code

FP001

26

114742

26

GA

506

m133077

506

ST260a

494

m133077

494

ST271

57

m130673

20

m132763

37

x9

NAS1515H3L

Purchased

No

230

Each

275.0000 4 4

***NAS1515H3L ***

Washer

all 10/16/15

Location

Loc Qty

Loc Code

FG

40

102472

40

FP001

55

m127831

55

ST266

180

m127831

40

m130726

140

x4

NAS1611-010

Purchased

No

230

Each

431.0000 8 8

NAS1611-010

O-RING

all 10/16/15

Location

Loc Qty

Loc Code

FP001

431

m130770

271

m131618

160

x8

October 16, 2015 11:21:43 AM

Shop Packet Print

Page 6

Picklist Print

October 16, 2015 11:21:43 AM

Page 7

Work Order ID: 137952

137952

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

NAS1611-013

Purchased

No

230

Each

230.0000

Start Qty: 1.00
8 8

Required Qty: 1.00

NAS1611-013

O-Ring

**

lll isle 18

Location

Loc Qty

Loc Code

FP001

230

m130758

230

NAS1149D0863J

Purchased

No

250

Each

594.0000

2

*X⁰
2*

NAS1149D0863.J

Washer

**

DAS
26
9-89

Location

Loc Qty

Loc Code

FP001

49

125484

49

ST260a

415

125268

315

125635

100

ST269

130

125268

130

D2744

Manufactured

No

110

Each

18.0000

1

1

D2744

Cap

**

BE15-10-20

Location

Loc Qty

Loc Code

LG001

18

128212

4

136178

14

D2600-3-BENT-RH

Manufactured

No

110

Each

6.0000

1

1

D2600-3-BFENT-RH

Extrusion Bent RH

**

15-10-20

Location

Loc Qty

Loc Code

LG002

6

130079

5

130175

1

October 16, 2015 11:21:43 AM

Shop Packet Print

Page 7

Picklist Print

October 16, 2015 11:21:43 AM

Page 8

Work Order ID: 137952

137952

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

D2743

Manufactured No

160 Each

Start Qty: 1.00
58.0000 8 8

Required Qty: 1.00

D2743

Crossbolt Spacer

**

8615-10-29

Location

Loc Qty

Loc Code

LG001

58

130731

58

8

D2739

Manufactured No

160 Each

0.0000 1 1

D2739

350 I Beam

ALS4-1032-225

AELS8-1032-225

Purchased

No

230 Each

556.0000 4 4

AI S4-1032-225

Rivnut

** ①

15-10-22 Jk

**

all wheels

Location

Loc Qty

Loc Code

FG

120

M127028

120

FP001

45

M131582

45

st549

391

M131582

391

X4

Picklist Print

October 16, 2015 11:21:43 AM

Page 9

Work Order ID: 137952

137952

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float
Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

AN8C35A

Purchased

No

230

Each

Start Qty: 1.00
99.0000 1 1

Required Qty: 1.00

AN8C35A

Bolt

all 15/11/15

Location

Loc Qty

Loc Code

FG

5

121275

5

FP001

64

m131947

13

m132169

6

m132381

15

m132522

15

m132674

15

ST273A

30

m133332

15

m133336

15

X 1

Picklist Print

October 16, 2015 11:21:43 AM

Page 10

Work Order ID: 137952

137952

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

AN6C44A

Purchased

No

230

Each

Start Qty: 1.00
601.0000 4 4

Required Qty: 1.00

AN6C44A

Bolt

ell 10/11/18

Location

Loc Qty

Loc Code

FP001

123

131649

100

m131367

1

m132169

22

ST273A

413

m130863

13

m131151

50

m132381

52

m132522

52

m132556

246

ST332

11

m130863

11

ST333

54

m130863

4

m131946

50

MS21083C8

Purchased

No

230

Each

35.0000 1 1

MS21083C8

Nut

ell 10/11/18

Location

Loc Qty

Loc Code

ST300

35

m132067

2

m133016

19

m133134

14

X1

Picklist Print

October 16, 2015 11:21:43 AM

Page 11

Work Order ID: 137952

137952

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

D3631-1

Manufactured No

230 Each

Start Qty: 1.00
178.0000 8 8

Required Qty: 1.00

D3631-1

Washer

**

all 10/16/15

Location

Loc Qty

Loc Code

FP001

178

128320

6

135951

100

136593

72

X1
X7

NAS1149C0332R

Purchased No

230 Each

5,312.000 4 4

NAS1149C0332R

WASHER

**

all 10/16/15

Location

Loc Qty

Loc Code

FP001

1004

m132930

1004

FP01

1521

m133284

1521

GA

441

m133284

441

ST271

2346

m133284

2346

X4

D2745

Manufactured No

230 Each

71.0000 8 8

D2745

Bushing

**

all 10/16/15

Location

Loc Qty

Loc Code

FP001

71

129584

7

131049

14

136214

50

13137731

X1
X7

Picklist Print

October 16, 2015 11:21:43 AM

Page 12

Work Order ID: 137952

137952

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

NAS1149C0832R

Purchased

No

230

Each

99.0000

Start Qty: 1.00

Required Qty: 1.00

1

1

NAS1149C0832R

Washer

**

lll 10/16/15

Location

Loc Qty

Loc Code

ST271

99

m125807

99

xl

AN3C6A

Purchased

No

230

Each

159.0000

4

4

AN3C6A

Bolt

**

lll 10/16/15

Location

Loc Qty

Loc Code

CA

39

m128704

39

FG

10

122416

10

ST249

50

m133363

50

ST338a

56

xl

m128769

50

m133077

6

ST349

4

m132767

4

Picklist Print

October 16, 2015 11:21:43 AM

Page 13

Work Order ID: 137952

137952

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

MS21043-6

Purchased

No

230

Each

Start Qty: 1.00
4 4

Required Qty: 1.00

MS21043-6

NUT

**

all is under

Location

Loc Qty

Loc Code

FG

20

103693

20

FP001

26

131618

2

m130325

2

m133077

1

m133234

21

ST304

13

m132164

13

M133483

x4

D3493-1

Manufactured

No

250

Each

25.0000

2

2

D3493-1

Washer

**

1x B137724

**DAS
28
9-89**

Location

Loc Qty

Loc Code

FG

10

97201

10

ST039

15

128755

15

1x

MS21083C8

Purchased

No

250

Each

35.0000

2

2

MS21083C8

Nut

**

Location

Loc Qty

Loc Code

ST300

35

m132067

2

m133016

19

m133134

14

**DAS
28
9-89**

2x

NOV 25 2015

Picklist Print

October 16, 2015 11:21:43 AM

Page 14

Work Order ID: 137952

137952

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

AN8C21A

Purchased No

250 Each

Start Qty: 1.00
92.0000 2 2

Required Qty: 1.00

AN8C21A

Bolt

★★

DAS
26
9-89

Location	Loc Qty	Loc Code
FG	4	
123966	2	
m132169	2	
ST273A	69	
m132542	11	
m132674	30	
m133332	28	
ST332	19	
m131100	1	
m132169	2	
m132381	12	
m132522	4	

DAS
28
9-89

2x

D2741

Manufactured No

250 Each

28.0000 1

D2741

Replacement Blade

★★

1

DAS
26
9-89

B135909

Location	Loc Qty	Loc Code
FG	10	
131616	10	
ST538	18	
131616	1	
132981	17	

DAS
28
9-89

NOV 25 2015

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D4168-041	350 SKIDTUBE ASSEMBLY, LH
	X			D4168-042	350 SKIDTUBE ASSEMBLY, RH
		X		D4168-043	350 SKIDTUBE ASSEMBLY, LH
			X	D4168-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D3488-041	BLADE FITTING, LH
	1			D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
8	8	8	8	D3631-1	WASHER
7	7	7	7	D3873-1	BUSHING
1	1	1	1	D4154-041	WEARPLATE ASSEMBLY
1				D4168-1	SKIDTUBE WELDMENT, LH
	1			D4168-2	SKIDTUBE WELDMENT, RH
		1		D4168-3	SKIDTUBE WELDMENT, LH
			1	D4168-4	SKIDTUBE WELDMENT, RH
4	4	4	4	D4170-1	SPACER
1	1	1	1	D4171-1	BUSHING
4	4	4	4	ALS4-1032-225	INSERT
4	4	4	4	AN3C6A	BOLT
1	1	1	1	AN3C34A	BOLT
4	4	4	4	AN3C36A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
9	9	9	9	AN960C10	WASHER (OR NAS1149C0363R)
4	4	4	4	AN960C10L	WASHER (OR NAS1149C0332R)
1	1	1	1	AN960C816L	WASHER (OR NAS1149C0832R)
5	5	5	5	MS21043-3	NUT
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

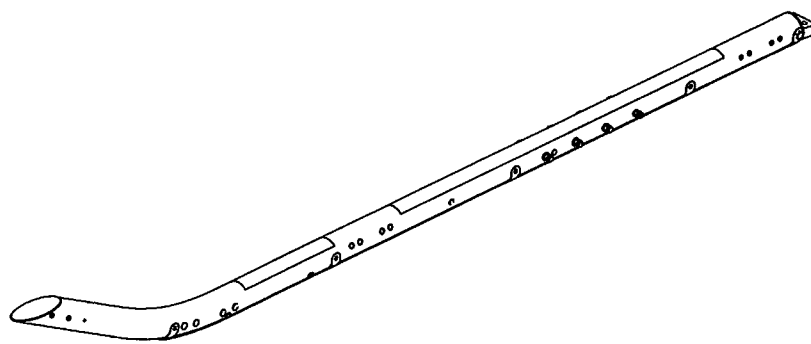
GENERAL NOTES:

- MATERIAL: MAKE D4168-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
STANDARD: PRIME (REF. 4.2.1.3.3) AND PAINT WHITE PER DART QSI 005 4.2
B. OPTIONAL: POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0" ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D4168-041/-042/-043/-044 = 32.3 LBS
- WELD PER DART QSI 004
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
FINISH WITH MEK DEGREASER.
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

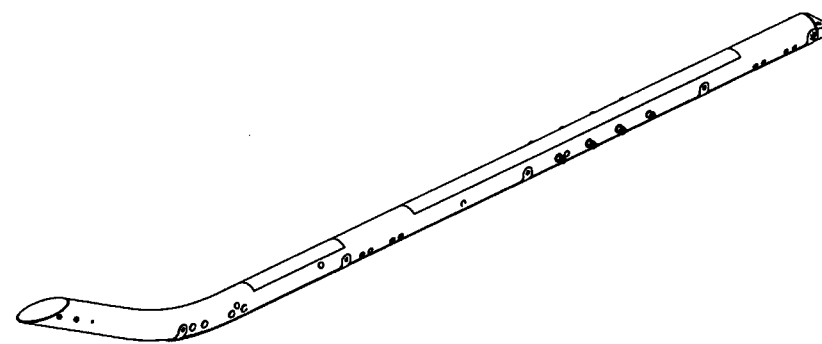
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2013-08-13
MP

SH 137952 20151016

B	ADD VIEW TO CONTROL FWD BEND ORIENTATION (2V D1-4/-6/-7); UPDATED FINISH OPTIONS. REASON: PAR13-276 AND NCR13-2757	MB	13.07.11
A	NEW ISSUE	SC	10.08.09
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MFG. APPR.	JP		
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DE APPR.	JP		
DATE	13.07.11		
DART AEROSPACE USA, INC. KENT, WA		REV. B	
DRAWING NO. D4168		SHEET 1 OF 11	
TITLE 350 SKIDTUBE ASSEMBLY		SCALE NTS	
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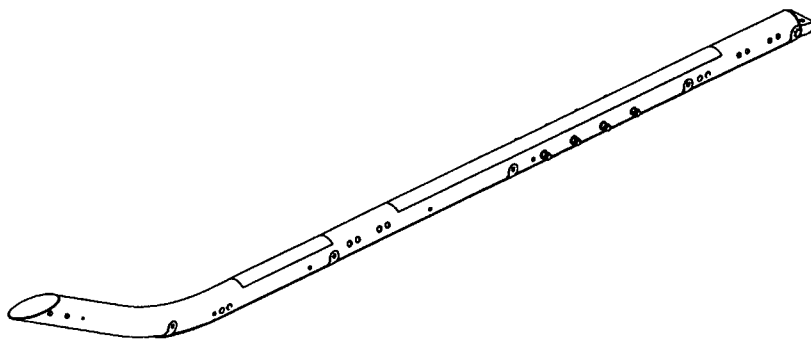
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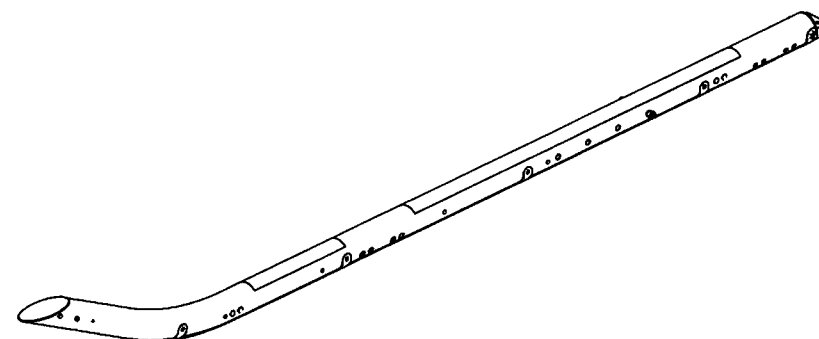
D4168-042 350 SKIDTUBE ASSEMBLY, RH

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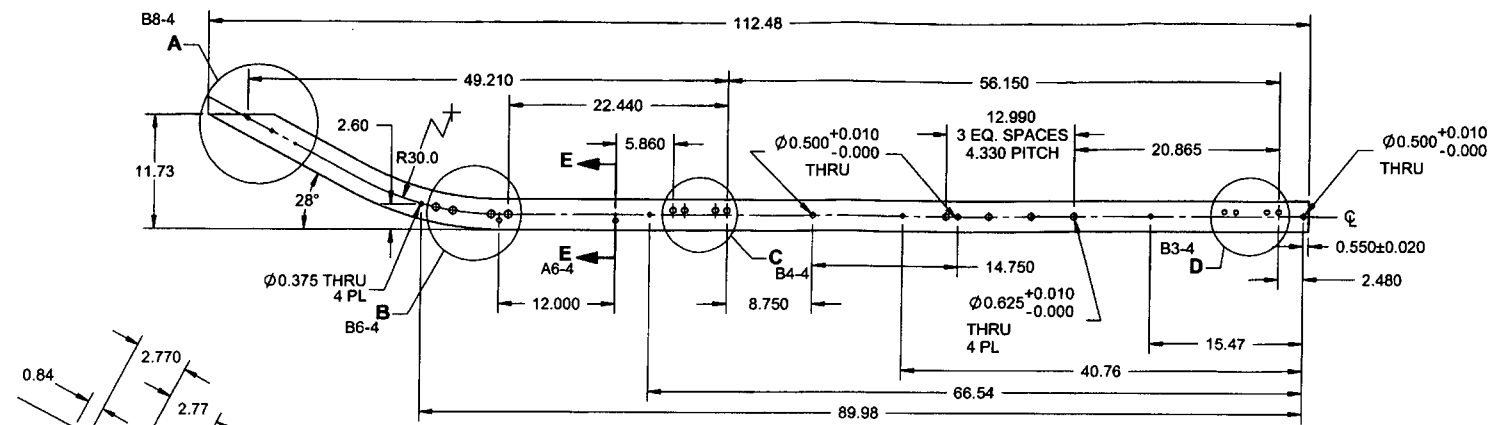


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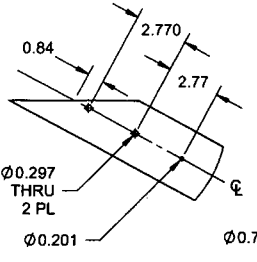
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MFG. APPR.	<i>[Signature]</i>	D4168	SHEET 3 OF 11
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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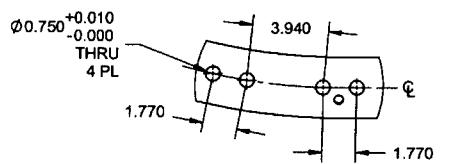
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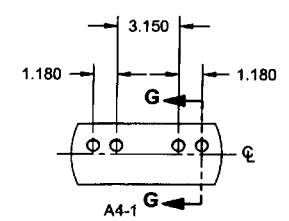
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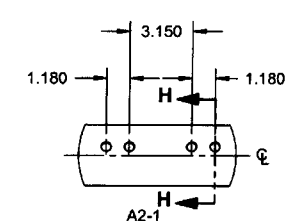
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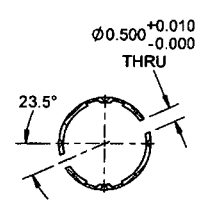
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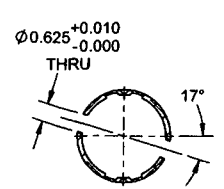
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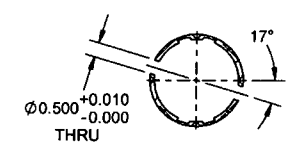
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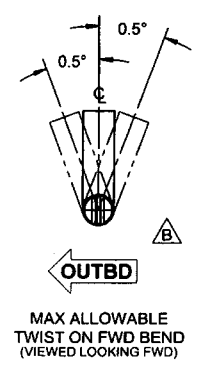
SECTION E-E
SCALE 3X, 2 PL



SECTION G-G
SCALE 3X, 4 PL



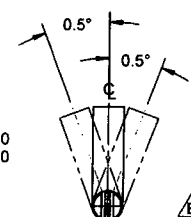
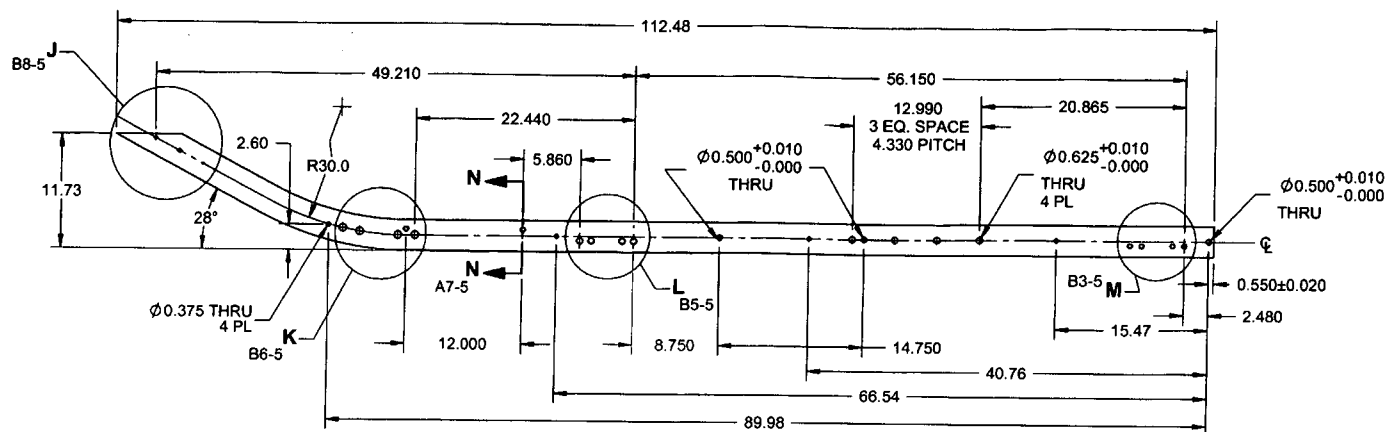
SECTION H-H
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TWIST ON FWD BEND
(VIEWED LOOKING FWD)

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2013-08-13

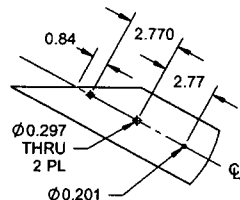
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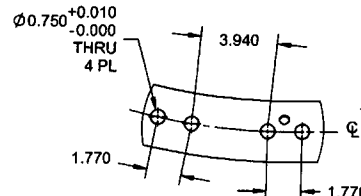
OUTBD

MAX ALLOWABLE
TWIST ON FWD BEND
(VIEWED LOOKING FWD)

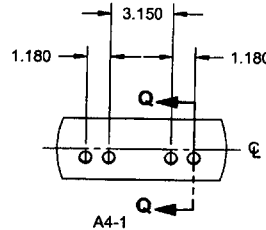
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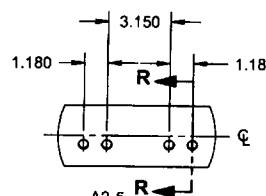
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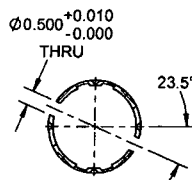
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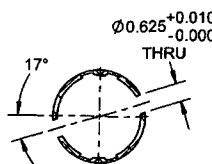
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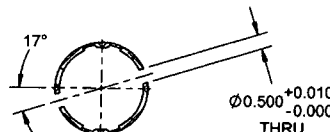
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SECTION N-N
SCALE 3X, 2 PL



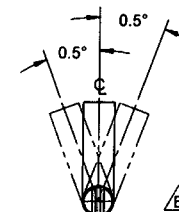
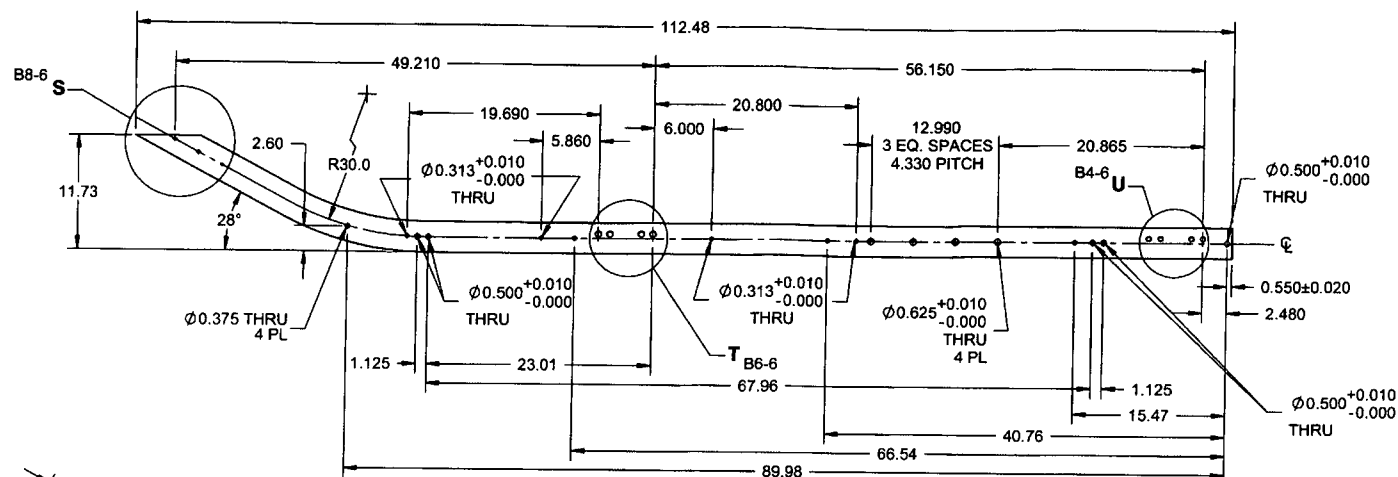
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SCALE 3X, 4 PL



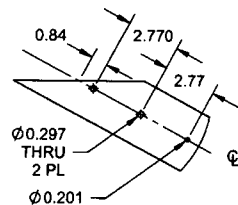
SECTION R-R
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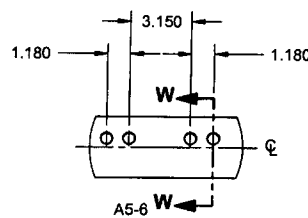
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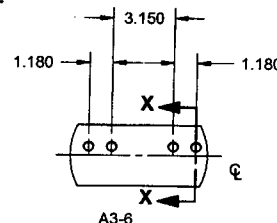
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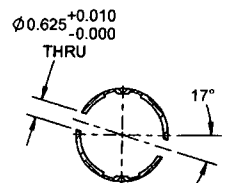
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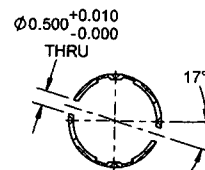
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DETAIL U
SCALE 2X



SECTION W-W
SCALE 3X, 4 PL



SECTION X-X
SCALE 3X, 4 PL

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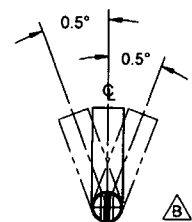
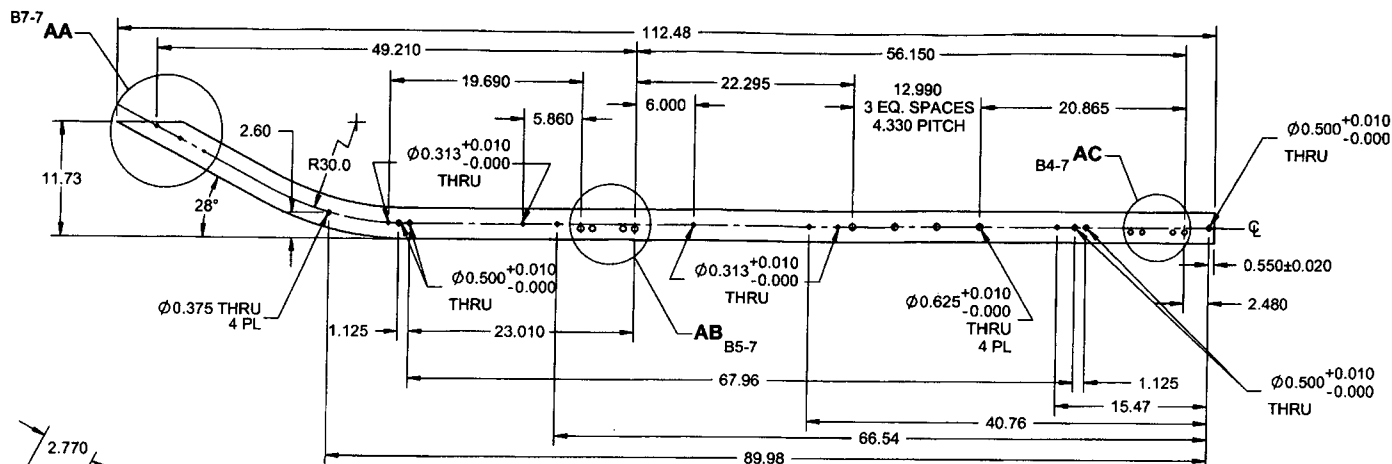
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SHEET 6 OF 11
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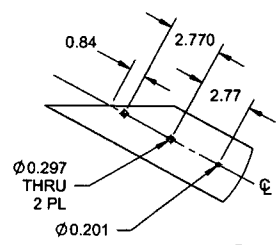
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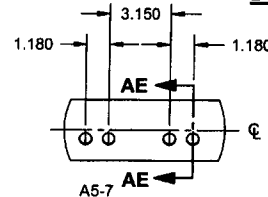


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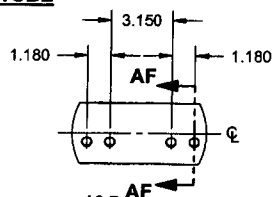
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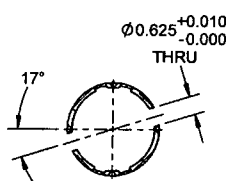
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D7-7



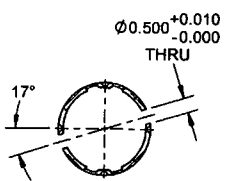
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SCALE 2X
C4-7



DETAIL AC
SCALE 2X
D3-7



SECTION AE-AE
SCALE 3X, 4 PL
B6-7

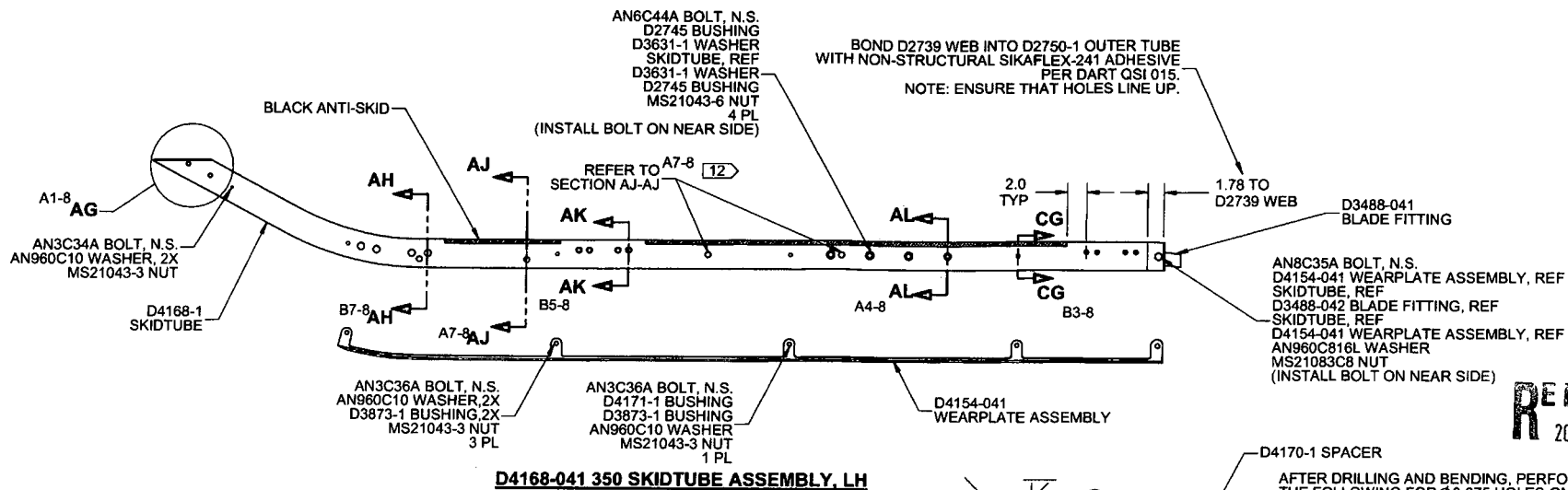


SECTION AF-AF
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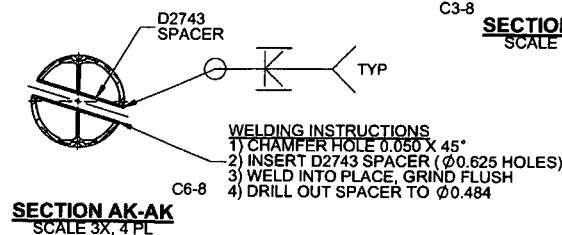
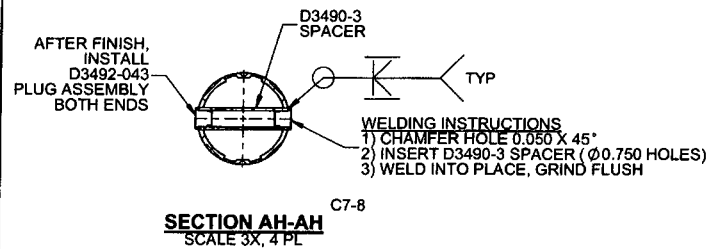
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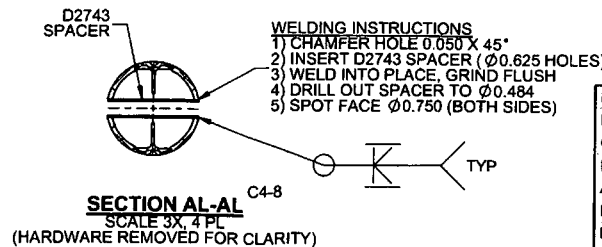
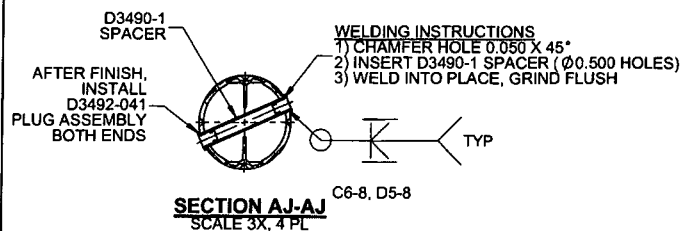
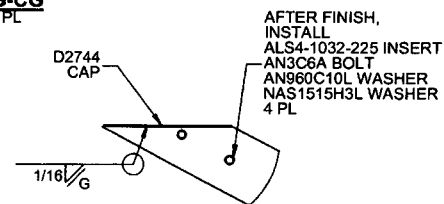
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SECTION CG-CG
SCALE 3X, 4 PL



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TITLE 350 SKIDTUBE ASSEMBLY
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SHEET 8 OF 11
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